## STATE OF NEVADA DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES DIVISION OF ENVIRONMENTAL PROTECTION-BUREAU OF AIR POLLUTION CONTROL

## Director's Review and Preliminary Determination of Permit Issuance for

Barrick Goldstrike Mines, Inc. (BGM) P.O. Box 29 Elko, Nevada 89803 December 28, 2011

BGM submitted two applications for minor revision of Class I (Title V) Operating Permit, AP1041-0739.02, to the Nevada Division of Environmental Protection – Bureau of Air Pollution Control (NBAPC). The two applications for minor revision were processed concurrently. The project is located in Eureka County, Nevada in all or portions of Sections 1-4, T35N-R49E; Sections 12-15, 21-28, and 33-36, T36N-R49E; and Sections 7-9, 16-21, and 28-32 T36N-R50E (MDB&M).

BGM proposes to add new equipment that will produce cement- and flyash-based backfill and ground support material for underground mining operations at Barrick Goldstrike. Other changes include the addition of a new emergency diesel generator, updating NESHAP provisions for existing gasoline storage tanks, reduction of permitted H<sub>2</sub>S emission rates for the autoclaves, and inclusion of RATA and reporting provisions for the roaster CEMS.

The facility-wide potential-to-emit (PTE) for criteria pollutants at Barrick Goldstrike, including new equipment covered under a concurrent pending application for a Class I OPTC, is given in the table below:

Current emission
estimates indicate that
the Barrick Goldstrike
is an existing major
stationary source for
PM, PM10, SO2, NOX,
and CO, with the
facility-wide PTE for
these pollutants greater
than the major PSD
source threshold of 250
tpy.

	mit (PTE) cility-Wide		
Pollutant		Minor Revisions (TPY)	Facility- Wide (TPY)
PM	(Particulate Matter)	2.00	462.72
PM10	(Particulate matter <10 microns in diam.)	1.62	415.32
SO2	(Sulfur Dioxide)	0.001	259.51
NO <sub>x</sub>	(Oxides of Nitrogen)	1.06	424.12
CO	(Carbon monoxide)	0.58	418.45
VOC	(Volatile Organic Compounds)	0.9	199.49
H2S	(Hydrogen Sulfide)	-42.32	39.90
HAPs (single)	(Hazardous Air Pollutants)	< 1	< 10
HAPs (all)	(Hazardous Air Pollutants)	< 1	< 25

The project is located in Air Quality Hydrographic Area (HA) 61U – the Boulder Flat Area (Upper) of the Humboldt River Basin. HA 61U is unclassified for all criteria pollutants. The current application is not a PSD permit action, based on U.S. EPA criteria for making such determinations. The new emergency generator is subject to NSPS 40 CFR Part 60, Subpart IIII and NESHAP 40 CFR Part 63, Subpart ZZZZ. Several existing gasoline storage tanks are subject to the NESHAP 40 CFR Part 63, Subpart CCCCCC for Gasoline Dispensing Facilities.

Air dispersion modeling conducted by the NBAPC demonstrates that continued operation of the Barrick Goldstrike property, after the proposed revisions are made, will not violate any applicable air quality standard.

BGM must comply with all State and Federal air quality requirements and all conditions established within the draft Class I (Title V) Operating Permit.